

Claims

[1] A shift control device for a straddle-type vehicle for performing shift control in which a shift actuator is stroked by a predetermined amount to rotate a shift shaft, and a dog is engaged and disengaged by the rotation of the shift shaft, the device comprising:

a transmission mechanism including:

a first coupling part and a second coupling part coupled for movement relative to each other;

an urging means for urging the first and second coupling parts toward a neutral position; and

a stopper mechanism for stopping the relative movement of the first or second coupling part when the first or second coupling part is moved relatively from the neutral position against urging force of the urging means,

wherein the transmission mechanism is disposed outside an engine case and interposed between the shift actuator and the shift shaft.

[2] The shift control device for a straddle-type vehicle according to Claim 1,

wherein the transmission mechanism is arranged such that, when resistive force acts against movement of the transmission mechanism:

the first or second coupling part moves relatively against the urging force of the urging means until the first or second coupling part is stopped by the stopper mechanism; and

then the first and second coupling parts move together.

[3] The shift control device for a straddle-type vehicle according to Claim 1, wherein the first and second coupling parts are coupled for movement relative to each other in sliding directions.

[4] The shift control device for a straddle-type vehicle

according to Claim 3, wherein the urging means includes a compression spring.

[5] The shift control device for a straddle-type vehicle according to Claim 1, wherein the first and second coupling parts are coupled for movement relative to each other in rotating directions.

[6] The shift control device for a straddle-type vehicle according to Claim 5, wherein the urging means includes a pine needle-like spring.

[7] The shift control device for a straddle-type vehicle according to Claim 5, wherein the transmission mechanism is disposed on the shift shaft.

[8] The shift control device for a straddle-type vehicle according to Claim 7, wherein the transmission mechanism is disposed on a gear shaft of a speed reduction mechanism coupled to the shift actuator.

[9] The shift control device for a straddle-type vehicle according to Claim 1, wherein:

the shift actuator is coupled to the shift shaft via a coupling mechanism for transmitting actuation force of the shift actuator; and

the transmission mechanism is held by the coupling mechanism.

[10] The shift control device for a straddle-type vehicle according to Claim 9, wherein the transmission mechanism is provided in a case held by the coupling mechanism.

[11] The shift control device for a straddle-type vehicle according to Claim 1, wherein:

the shift actuator is coupled to the shift shaft via a

coupling mechanism for transmitting actuation force of the shift actuator; and

the coupling mechanism is of adjustable length.

[12] A straddle-type vehicle incorporating the shift control device according to any one of Claims 1, 9, 10 and 11.